

Remarks

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

Initially, the Applicants would like to thank the Examiner for conducting the personal interview on July 14, 2005. It is noted that the proposed amendments to claims 2, 4 and 22 discussed during the interview and agreed to as overcoming the prior art rejections in the Office Action of March 3, 2005 have been included in this Amendment.

Pursuant to the Examiner's requirement, the title of the invention has been changed so as to be clearly indicative of the invention to which the claims are directed.

The specification and abstract have been reviewed and revised to make a number of editorial revisions. A substitute specification and abstract have been prepared and are submitted herewith. No new matter has been added.

Replacement Figure 15 is enclosed herewith. Figure 15 has been amended so as to replace a term written in Japanese below the signal processing unit 1516 with the label "OUTPUT". No new matter has been added by this amendment.

Claims 2, 9, 22, 25 and 27 have been rejected under 35 U.S.C. §102(b) as being anticipated by Toshihisa (JP 11-3550). Claim 4 has been rejected under 35 U.S.C. §102(b) as being anticipated by Takeya (EP 0807926). Claim 24 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Toshihisa in view of Nishiuchi (US 6,771,587).

As mentioned above, claims 2, 4 and 22 have been amended so as to further distinguish the present invention from the references relied upon in the rejections.

Further, claims 2, 4, 8-10, 22, 24-28, 35, 40 and 45 have been amended to make a number of editorial revisions thereto. These revisions have been made to place the claims in better U.S. form. None of these amendments have been made to narrow the scope of protection of the claims, nor to address issues related to patentability, and therefore, these amendments should not be construed as limiting the scope of equivalents of the claimed features offered by the Doctrine of Equivalents.

In addition, withdrawn claims 1, 3, 5-7, 11-21, 23, 29-34, 36-39, 41-44 and 46-69 have been canceled without prejudice or disclaimer to the subject matter contained therein.

The above-mentioned rejections are submitted to be inapplicable to the amended claims for the following reasons.

Claim 2 is patentable over Toshihisa, since claim 2 recites an optical disc drive including, in part, a laser driver operable to drive a semiconductor laser; and a convergence detection unit operable to detect convergence of a light beam emitted to one of a plurality of data layers of an optical disc before the optical disc drive detects address information, wherein the optical disc drive controls the laser driver based on an output from the convergence detection unit, and sets light beam emission power when reading from the optical disc separately for each of the plurality of data layers of the optical disc before the address information is detected. Toshihisa fails to disclose or suggest these features of claim 2.

Toshihisa discloses an information recording and reproducing device for use with a recording medium 1 having a plurality of layers. The device includes a control part 6 and an LD power control part 16. The control part 6 initially calculates a layer number and a radial position to which light beams are radiated based on address information and reads an appropriate power value preliminarily stored in an EPROM 7 according to the calculation. The control part 6 then uses the power value to control the LD power control part 16 such that the light beams have a proper power during operations of recording, erasing and reproduction. (See Abstract and Figure 1).

Based on the above discussion, it is clear that the device of Toshihisa relies on reading the address information from the recording medium 1 in order to calculate the layer number and the radial position of the light beams. On the other hand, claim 2 recites that the convergence detection unit detects convergence of a light beam emitted to one of a plurality of data layers of an optical disc before the optical disc drive detects address information. Further, claim 2 also recites that the optical disc drive sets light beam emission power when reading from the optical disc separately for each of the plurality of data layers of the optical disc before the address information is detected. It is apparent that Toshihisa fails to disclose or suggest these features of claim 2. As a result, claim 2 is patentable over Toshihisa.

As for claim 22, it is patentable over Toshihisa for reasons similar to those discussed above in support of claim 2. That is, claim 22 recites an optical disc drive including, in part, a laser driver operable to drive a semiconductor laser; and a convergence detection unit operable to detect convergence of a light beam before the optical disc drive detects address information, wherein the optical disc drive controls the laser driver based on an output from the convergence detection unit, and sets light beam emission power when recording to an optical disc separately

for each of a plurality of data layers of the optical disc before the address information is detected, which features are not disclosed or suggested in the reference.

Claim 4 is patentable over Takeya, since claim 4 recites an optical disc drive including, in part, an equalization controller operable to control equalization characteristics of an RF signal for output from the optical disk drive; and a convergence detection unit operable to detect convergence of a light beam emitted to one of a plurality of data layers of an optical disc, wherein the optical disc drive sets the equalization characteristics of the RF signal for output from the optical disk drive for each of the plurality of data layers based on an output from the convergence detection unit. Takeya fails to disclose or suggest these features of claim 4.

Takeya discloses an apparatus for reading an optical disc 20 having a plurality of layers. The apparatus includes a motor 21, an optical pickup 22, an RF amp 23, a focus servo loop, a tracking servo loop and a spindle servo loop. The focus servo loop includes a focus coil drive circuit 30 and a digital equalizer 28. The tracking servo loop includes a tracking drive circuit 37 and a digital equalizer 35. The spindle servo loop includes a spindle motor drive circuit 47. Takeya also discloses that in the focus servo loop, at least one of a gain value and an equalizer value of the focus servo loop for each of the layers of the optical disc 20 is measured based on a focus error signal of each of the layers. (See column 13, line 36 – column 14, line 7; column 5, lines 37-48; and Figure 1).

In the rejection, it is indicated that the above-discussed equalizer value of the focus error signal in the focus servo loop corresponds to the claimed equalization characteristics of the RF signal. However, claim 4 now recites that the equalization controller controls the equalization characteristics of the RF signal for output from the optical disk drive. It is clear from Figure 1 and column 5, lines 37-48 of Takeya that the equalizer value discussed in Takeya is of the focus error signal which is a feedback signal utilized by the focus servo loop and is not an RF signal outputted from the apparatus. Therefore, the equalizer value of the focus error signal of Takeya does not correspond to the claimed equalization characteristics of the RF signal for output. As a result, claim 4 is patentable over Takeya.

It is noted that Nishiuchi is relied upon as disclosing a separation layer 5 located between a first substrate 1 and a second substrate 3. However, Nishiuchi fails to disclose or suggest the above-discussed features of claims 2, 4 and 22.

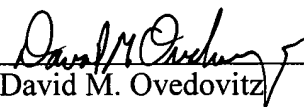
Since independent claims 2, 4 and 22 are patentable over the references relied upon in the above-mentioned rejections, it is apparent that withdrawn claims 8, 10, 26, 28, 35, 40 and 45 should now be considered as each being dependent from one of these independent claims.

Because of the above-mentioned distinctions, it is believed clear that claims 2, 4, 8-10, 22, 24-28, 35, 40 and 45 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 2, 4, 8-10, 22, 24-28, 35, 40 and 45. Therefore, it is submitted that claims 2, 4, 8-10, 22, 24-28, 35, 40 and 45 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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August 3, 2005